

SNC125c™

Enhanced Penumbra Without Signal Compromise

SNC125c is a waterproof, fully-guarded, thimble ionization chamber with a design that reduces the convolution of high-dose gradient regions during profile and depth measurements. It is intended for use in scanning, field, and reference dosimetry measurements.



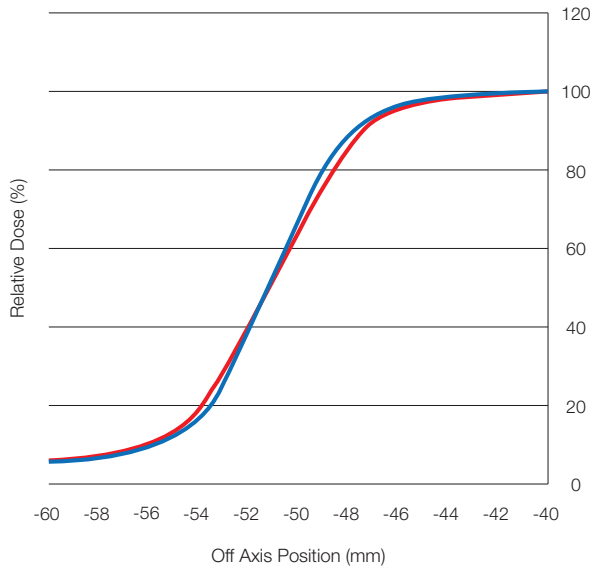
Features and Benefits

- Enhanced penumbra without loss of signal strength
- Easier set up
 - The seam on the chamber body between black and white indicates correct set up of the detector in relation to the detector holder*
 - The white chamber body gives a clear line of sight to the crosshairs and lasers during set up and set up verification
- True measurement
 - Using a smaller inner diameter size results in a truer measurement of high dose gradients
- Meets IEC 60731 standards for reference class dosimeters
- k_Q factors available for TG-51, TRS398 and DIN 6200-1 calibrations**
- No need for secondary water-proofing
- Triaxial BNC and TNC type connectors available

*When using the 3D SCANNER™

** k_Q data according to TRS398, AAPM TG-51 and DIN 6800-2 for Sun Nuclear's ionization chambers SNC125c and SNC600c, as well as the corresponding fit parameters can be openly accessed in *Monte Carlo calculated beam quality correction factors for two cylindrical ionization chambers in photon beams*, Alissa, et al, *Physica Medica* 94 (2022).

Chamber Comparisons When Measured by a 3D SCANNER™



Optimized to work with the 3D SCANNER, the SNC125c™ always maintains the ideal orientation while performing scans.

The SNC125c has the sensitivity of a 0.125 cm³ chamber and a penumbra closer to a micro chamber.

- SNC125c (penumbra 4.6 mm)
- IBA CC13 (penumbra 5.3 mm)

Specifications

Active Volume (cm³): 0.108

Active Length (mm): 7.05

Active Diameter (mm): 4.75

Sensitivity (nC/Gy): 3.4

Wall Material: Paint 0.05 mm
PMMA 0.30 mm
Graphite 0.25 mm

Electrode: 0.8 mm diameter aluminum

Vented: To atmosphere through water-proof tubing

Waterproofing: Viton tubing

Polarizing Voltage: ±400V Max

Cable Length (m): 1.5

Cable Connector: TNC or BNC

Not recommended for use in square 3D water phantoms

